

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1999:48576 CAPLUS  
 DN 130:155191  
 ED Entered STN: 25 Jan 1999  
 TI Moisture-resistant paper coated with styrene-acrylic compound copolymer emulsions containing rosin for packaging electrophotog. paper and manufacture thereof  
 IN Yoshimura, Jiro; Watanabe, Mitsuyuki; Tamura, Kinya; Seki, Ikuko; Yamazaki, Yoichi  
 PA Nihon Seishi K. K., Japan  
 SO Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM D21H019-56  
 ICS B65D065-40; B65D085-00; D21H019-24; D21H019-18; D21H019-14; G03G007-00  
 CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)  
 Section cross-reference(s): 42, 74  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI JP 11012989	A2	19990119	JP 1997-187323	19970627 <--
PRAI JP 1997-187323		19970627		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
-----	-----	-----
JP 11012989	ICM	D21H019-56
	ICS	B65D065-40; B65D085-00; D21H019-24; D21H019-18; D21H019-14; G03G007-00

AB The moisture-resistant paper is prepared by coating the surface of paper with compns. containing mixts. of styrene-acrylic compound copolymers (A) and rosin, prepared by adding rosin to polymerization mixts. during the emulsion polymerization step for manufacture of A, waxes, and pigments and 0-50 parts butadiene-styrene copolymer (I) per 100 parts mixts. of A and rosin and drying the coating. Kraft paper was coated with 100:3:5 (weight ratio) mixture of Saivinol X 595-905E3 [emulsion containing 61:21:15 (weight ratio) mixture of styrene-acrylic compound copolymer, rosin, and I], paraffin wax emulsion (SKP-W), and heavy CaCO<sub>3</sub> (SS-30) to solids content 20 g/m<sup>2</sup> and dried to give coated paper exhibiting water vapor transmission 30 g/m<sup>2</sup>-24 h.  
 ST paper acrylic polymer coated moisture resistant; styrene acrylic compd copolymer paper coating; rosin paper coating moisture resistant; wax paper coating moisture resistant; electrophotog paper packaging moisture resistant; copying paper packaging moisture resistant  
 IT Paraffin waxes, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (SKP-W, coating; moisture-resistant paper coated with styrene-acrylic compound copolymer emulsions containing rosin for packaging electrophotog. paper and manufacture thereof)  
 IT Pigments, nonbiological  
 (coatings; moisture-resistant paper coated with styrene-acrylic compound copolymer emulsions containing rosin for packaging electrophotog. paper and manufacture thereof)  
 IT Acrylic polymers, uses  
 Rosin  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (coatings; moisture-resistant paper coated with styrene-acrylic compound copolymer emulsions containing rosin for packaging electrophotog. paper and manufacture thereof)  
 IT Coating materials

(emulsion; moisture-resistant paper coated with styrene-acrylic compound copolymer emulsions containing rosin for packaging electrophotog. paper and manufacture thereof)

IT Copying paper  
Electrophotographic paper  
Water-resistant materials  
(moisture-resistant paper coated with styrene-acrylic compound copolymer emulsions containing rosin for packaging electrophotog. paper and manufacture thereof)

IT Paper  
(packaging; moisture-resistant paper coated with styrene-acrylic compound copolymer emulsions containing rosin for packaging electrophotog. paper and manufacture thereof)

IT Packaging materials  
(paper; moisture-resistant paper coated with styrene-acrylic compound copolymer emulsions containing rosin for packaging electrophotog. paper and manufacture thereof)

IT 471-34-1, SS 30, uses 9003-55-8, Butadiene-styrene copolymer  
220247-33-6, Saivinol X 595-901E3 220247-34-7, Saivinol X 595-901E12  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(coating; moisture-resistant paper coated with styrene-acrylic compound copolymer emulsions containing rosin for packaging electrophotog. paper and manufacture thereof)

IT 100-42-5D, Styrene, polymers with acrylic compds.  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(coatings; moisture-resistant paper coated with styrene-acrylic compound copolymer emulsions containing rosin for packaging electrophotog. paper and manufacture thereof)

RN 471-34-1  
RN 9003-55-8  
RN 220247-33-6  
RN 220247-34-7  
RN 100-42-5D

L4 ANSWER 2 OF 3 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
AN 1999-149186 [13] WPIX  
DNN N1999-108808 DNC C1999-044517  
TI Packaging moisture-proof paper for electrophotographic paper - contains a styrene-acryl copolymer, resin, wax and a pigment.  
DC A18 A82 F09 G02 P84 Q34  
PA (NISE-N) NIPPON SEISHI KK  
CYC 1  
PI JP 11012989 A 19990119 (199913)\* 5 D21H019-56 <--  
ADT JP 11012989 A JP 1997-187323 19970627  
PRAI JP 1997-187323 19970627  
IC ICM D21H019-56  
ICS B65D065-40; B65D085-00; D21H019-14; D21H019-18; D21H019-24; G03G007-00  
AB JP 11012989 A UPAB: 19990331  
A moisture-proof layer capable of water maceration and containing wax is provided on the surface of a paper base material. The moisture-proof layer contains a styrene-acryl copolymer, a resin, wax, and a pigment. Also claimed is that the production comprises: (a) preparing a coating solution containing the styrene-acryl copolymer, the rosin, the wax, the pigment, and the styrene-butadiene copolymer, 0-50 pts. weight per 100 pts. weight in all of the styrene-acryl copolymer and the rosin; (b) coating the coating solution on the surface of the paper base material; (c) drying the coating solution Where, the rosin is added in applying emulsion polymerization to the styrene-acryl copolymer.  
ADVANTAGE - The packaging moisture-proof paper has sufficient

maceration. The result recovers the packaging moisture-proof paper and evolves no decrease in coefficient of friction in small cut paper. The packaging moisture-proof paper has good moisture proofing, and evolves no wax transfer.

Dwg.0/0

FS CPI GMPI

FA AB

MC CPI: A03-C02; A04-B03; A04-C04; A04-F01A1; A11-B05D; A12-B03A; A12-L05; F05-A06B; G02-A05C; G06-A

L4 ANSWER 3 OF 3 JAPIO (C) 2004 JPO on STN  
AN 1999-012989 JAPIO

TI MOISTURE-PROOF PAPER FOR PAPER PACKAGING FOR ELECTROPHOTOGRAPHY AND ITS PRODUCTION

IN YOSHIMURA JIRO; WATANABE MITSUYUKI; TAMURA KINYA; SEKI IKUKO; YAMAZAKI YOICHI

PA NIPPON PAPER IND CO LTD

PI JP 11012989 A 19990119 Heisei

AI JP 1997-187323 (JP09187323 Heisei) 19970627

PRAI JP 1997-187323 19970627

SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1999

IC ICM D21H019-56

ICS B65D065-40; B65D085-00; D21H019-24; D21H019-18; D21H019-14; G03G007-00

AB PROBLEM TO BE SOLVED: To obtain a moisture-proof paper for paper packaging for electrophotography without lowering the frictional coefficient of small-sized cutting paper and without causing transfer of wax, and capable of being reproduced, by providing a water-defiberizable specific moisture-proofing layer containing wax on the surface of paper substrate.

SOLUTION: This moisture-proof paper is provided with a water-disaggregatable moisture-proof layer containing wax on the surface of paper substrate, and the moisture-proof layer comprises a styrene-acrylic copolymer, rosin, wax and pigment such as calcium carbonate having 5-30  $\mu$ m average particle diameter. The moisture-proof layer comprises, preferably, a mixture of a styrene-acryl copolymer with a rosin and a styrene-butadiene copolymer in an amount of 0-50 pts.weight based on 100 pts.weight of the mixture and the weight ratio of the styrene-acryl copolymer with the rosin is preferably (70/30) to (95/5).

COPYRIGHT: (C)1999,JPO

=>